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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,201	04/06/2004	Davide Gariglio	15043	7417

7590 05/10/2006  
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EXAMINER

RACHUBA, MAURINA T

ART UNIT PAPER NUMBER

3723

DATE MAILED: 05/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/820,201	<b>Applicant(s)</b> GARIGLIO, DAVIDE	
	<b>Examiner</b> M Rachuba	<b>Art Unit</b> 3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 March 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 3-5 and 7-19 is/are rejected.
- 7) ☒ Claim(s) 2 and 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

**DETAILED ACTION**

***Election/Restrictions***

1. Applicant's election without traverse of group I, claims 1-19 in the reply filed on 13 March 2006 is acknowledged. Claim 20 has been withdrawn.

***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 5, and 8-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bando, 4,228,617. '617 discloses the claimed invention, including at least first, second, third and fourth abrasive wheels (**75-78**) for grinding and polishing the edges and bevels of a glass slab, each of the grinding wheels driven by it's own spindle (**61-64**), to independently rotate and to move axially, figures 1-3; a supporting structure **60** for the spindles and attaching and handling means carried by the supporting structure for coupling the supporting structure to the chassis **66** in a movable way at least in a first advancement direction and configured to be motored in order to displace, during operation, the supporting structure with respect to the chassis along the section to be ground in first advancement direction; a slide (**figures 11, 12**) configured to cooperate with a guide carried by the chassis; at least one of the four axes is parallel to at least one other of the four axes; at least one of the four axes is not parallel to at least one other of the four axes; there is a motor for each spindle for rotating the grinding wheel

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and a motor (94) for each spindle for axially advancing the grinding wheel; the axes are orthogonal to a rectilinear direction that is parallel during operation, to a section to be ground, and the grinding wheels have a diameter; at least part of the motors have respective elongated structures in orthogonal directions to a rectilinear direction; the grinding head comprises two first spindles that are able to rotate around respective mutually parallel first axes lying in a plane, and two second spindles that form respective angles that are mutually equal and opposite with the plane; a plurality of wheels to support and move the slab; the grinding wheel for grinding and polishing the threads and the grinding wheel for polishing the edge are driven by their respective spindles to create constant pressure by the grinding wheels on the glass slab during operation and to compensate for the consumption of the grinding wheels during their operation; resilient means pre-loaded by a stepped motor that drives a ball screw for realizing the constant pressure on the glass slab during operation; and where each of the spindles further comprises braking means that operates on sliding guides and block an advancement of the grinding wheels against the glass slabs between one slab and a following slab, to prevent the grinding wheels from penetrating into a hollow space between the two successive glass slabs during operation, figure 4. '617 does not disclose that the angle between the first and third, and second and fourth, grinding wheels; is such that the first and third grinding wheels rotate around an axis perpendicular to a rotation axis of the second and fourth grinding wheels. '617 does disclose that the second and fourth wheels are positioned at an angle relative to the first and third wheels, to grind and polish the bevel on the glass slab. It would have been

obvious to one of ordinary skill in the art to have provided '617 with the desired angles, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.. Here, the difference in angle between the first and third, and second and fourth grinding wheels is considered a range, and it would have been obvious, as broadly claimed, to have angled the grinding wheels as desired to achieve the bevel shape desired. Further, '617 does not disclose the claimed diameter of the grinding wheels. It would have been obvious to one of ordinary skill in the art to have provided '617 with the desired diameters, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. Here, one of ordinary skill in the art would consider it obvious to size the grinding tools as desired dependent on the shape and size of the workpiece being ground.

***Allowable Subject Matter***

3. Claims 2 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
4. The following is a statement of reasons for the indication of allowable subject matter: the prior art of record does not disclose or fairly teach two first grinding wheels, or a fifth wheel interposed between the supporting structure and the slide to allow a rotation of the supporting structure with respect to the slide around a hinge axis. '617 only discloses the four grinding wheels, and discloses that each individual grinding

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mechanism pivots about an axis, but does not disclose that the supporting structure rotates relative to the slide, that allows each grinding wheel to move up and down relative to the support.

***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Other similar grinding tools are cited of interest.
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M Rachuba whose telephone number is 571-272-4493. The examiner can normally be reached on Monday-Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571-272-4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M Rachuba  
Primary Examiner  
Art Unit 3723

